

WHAT IS CLAIMED IS:

1. A wireless communication device for performing wireless communication through set operational frequency bands, the wireless
5 communication device comprising:

a storage section for storing the set frequency bands, variable values for the respective frequency bands, and a frequency band used for a normal service operation;

10 a power supply section for supplying a power for performing the normal service operation in accordance with an input command;

a comparison section for determining whether a received frequency is synchronized with spaced frequencies set in the frequency band used for the normal service operation and stored in the storage section, if the power is supplied;

15 a determining section for determining whether the synchronized frequency is included in the frequency band used for the normal service operation, if the received frequency is synchronized at least once with the spaced frequencies; and

20 a control section for selecting the frequency band used for the normal service operation as an operational frequency band, if the synchronized frequency is included in the frequency band used for the normal service operation.

2. The wireless communication device as claimed in claim 1,
25 wherein the comparison section, if it is determined that the received frequency is not synchronized with any of the spaced frequencies, compares whether the received frequency is synchronized with spaced frequencies set in the frequency bands stored in the storage section other than the frequency band used for the normal service operation.

3. The wireless communication device as claimed in claim 1,
wherein the frequency bands stored in the storage section include at least one of a
frequency band allocated to a personal communication system (PCS) and a
frequency band including a global system for mobile communication (GSM) and
5 a digital cellular system (DCS).

4. The wireless communication device as claimed in claim 2,
wherein if the determining section determining that the synchronized frequency
is not included in the frequency band used for the normal service operation, the
10 control section determining whether the synchronized frequency is in an
overlapping band of different kinds of frequency bands used in different areas,
and if the synchronized frequency is in the overlapping band, the control section
selects the whole band as a operational frequency band.

15 5. The wireless communication device as claimed in claim 1,
wherein the variable values corresponding to the frequency bands stored in the
storage section are each composed of 4 bits.

6. A method for selecting an operational frequency band using a
20 wireless communication device, the method comprising the steps of:

storing frequency bands set for performing wireless communication,
variable values for the respective frequency bands, and a frequency band used for
a normal service operation;

supplying a power for performing the normal service operation in
25 accordance with an input command;

determining whether a received frequency is synchronized with spaced
frequencies set in the frequency band used for the normal service operation and
stored in the storage section, if the power is supplied;

determining whether the synchronized frequency is included in the frequency band used for the normal service operation, if the received frequency is synchronized at least once with the spaced frequencies; and

5 selecting the frequency band used for the normal service operation as an operational frequency band, if the synchronized frequency is included in the frequency band used for the normal service operation.

7. The method as claimed in claim 6, further comprising a step of comparing whether the received frequency is synchronized with spaced 10 frequencies set in the frequency bands stored in the storage section other than the frequency band used for the normal service operation, if the received frequency is not synchronized with any of the spaced frequencies set in the frequency band used for the normal service operation.

15 8. The method as claimed in claim 6, wherein the frequency bands stored in the storage section include at least one of a frequency band allocated to a personal communication system (PCS) and a frequency band including a global system for mobile communication (GSM) and a digital cellular system (DCS).

20 9. The method as claimed in claim 7, further comprising the step of:

selecting the frequency band allocated to the personal communication system (PCS) as the operational frequency band, if the synchronized frequency is not included in the frequency band used for the normal service operation.

25

10. The method as claimed in claim 6, wherein the variable values corresponding to the frequency bands stored in the storage section are each composed of 4 bits.

30